Date: Wed, 14 Apr 93 12:31:26 PDT
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>
Errors-To: Packet-Radio-Errors@UCSD.Edu
Reply-To: Packet-Radio@UCSD.Edu
Precedence: Bulk
Subject: Packet-Radio Digest V93 #101
To: packet-radio

Packet-Radio Digest Wed, 14 Apr 93 Volume 93 : Issue 101

Today's Topics:

AMPRNet IP Address Coordinators
Baycom / PMP - problem
Cable TVI interference (2 msgs)
DPK-2
DRSI modems
F6FBB 'Port' Numbers (2 msgs)
Getting in contact with TCP coordinator for Southern Wisconsin
help
KA9Q more than 2 packet drivers ?
MSYS 1.14; is it out?
Packet radio in Washington, DC - info please.
Possible KAME v6.1 problem
RFD: reorganization of rec.radio.amateur

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 14 Apr 93 18:39:59 GMT
From: news-mail-gateway@ucsd.edu
Subject: AMPRNet IP Address Coordinators
To: packet-radio@ucsd.edu

AMPRNet IP address coordinators as of 14 April 1993

Corrections and updates to brian@ucsd.edu.

Note: the people listed here have volunteered to issue IP addresses for their areas. They are not paid to do this service; please understand that they are perfectly at ease to deal with coordination responses at a lower priority than the things that matter more, such as job and family. Please be patient when requesting an address.

44.002	Bob Meyer	K6RTV	Calif: Sacramento
44.004	Douglas Thom	N6OYU	Calif: Silicon Valley - San Francisco
44.006	Don Jacob	WB5EKU	Calif: Santa Barbara/Ventura
44.008	Brian Kantor	WB6CYT	Calif: San Diego
44.010	Terry Neal	AA6TN	Calif: Orange County
44.012	Steven King	KD7RO	Eastern Washington,Idaho
44.014	John Shalamskas	KJ9U	Hawaii & Pacific Islands
44.016	Jeff Angus	WA6FWI	Calif: Los Angeles - S F Valley
44.017	Dana Myers	KK6JQ	Calif: Antelope Valley/Kern County
44.018	Geoffrey Joy	KE6QH	Calif: San Bernardino & Riverside
44.020	Fred Schneider	K0YUM	Colorado: Northeast
44.022	John Stannard	KL7JL	Alaska
44.024	Dennis Goodwin	KB7DZ	Washington state: Western (Puget Sound)
44.026	Ron Henderson	WA7TAS	Oregon
44.028	Don Adkins	KD5QN	Texas: North
44.030	J Gary Bender	WS5N	New Mexico
44.032	Bdale Garbee	N3EUA	Colorado: Southeast
44.034	Mark J. Bailey	N4XHX	Tennesee
44.036	Doug Drye	KD4NC	Georgia
44.038	Mike Abbott	N4QXV	South Carolina
44.040	Jeff Jacobsen	WA7MBL	Utah
44.042	Phil Akers	WA4DDE	Mississippi
44.044	Bob Wilson	KA1XN	Massachusetts: western
44.046	William Simmons	WB0ROT	Missouri
44.048	Jacques Kubley	KA9FJS	Indiana
44.050	Ron Breitwisch	KC0OX	Iowa
44.052	Gary Grebus	K8LT	New Hampshire
44.054	Ralph Stetson	KD1R	Vermont
44.056	Don Hughes	KA1MF	Eastern&Central Mass
44.058	Rich Clemens	KB8AOB	West Virginia
44.060	Howard Leadmon	WB3FFV	Maryland
44.062	Jim DeArras	WA4ONG	Virginia
44.062	Jon Gefaell	KD4CQY	Virginia (Charlottesville Area)
44.064	Dave Trulli	NN2Z	New Jersey: northern
44.065	Bob Applegate	WA2ZZX	New Jersey: southern
44.066	John DeGood	NU3E	Delaware
44.068.1-32	Bob Foxworth	K2EUH	New York: NYC & Long Island
44.068.64+	Bob Bellini	N2IGU	New York: ENY
44.069	Paul Gerwitz	WA2WPI	New York: WNY
44.070	Gary Sanders	N8EMR	Ohio
44.072	Ken Stritzel	WA9AEK	Chicago - North Ill.
44.073	Chuck Henderson	WB9UUS	South/Central Ill.
44.074	James Curran	KA4OJN	North Carolina (east)

```
44.075   Charles Layno      WB4WOR   North Carolina (west)
44.076   Kurt Freiberger         WB5BBW   Texas: south
44.077   Rod Huckabay       KA5EJX   Texas: west
44.078   Joe Buswell        K5JB Oklahoma
44.080   Doug Crompton      WA3DSP   Pennsylvania: eastern
44.082   Steven Elwood      N7GXP    Montana
44.084   Bob Ludtke         K9MWM    Colorado: Western
44.086   Reid Fletcher      WB7CJO   Wyoming
44.088   Jon Bloom     KE3Z Connecticut
44.090   Mike Nickolaus          NF0N Nebraska
44.092   Pat Davis     KD9UU    Wisconsin, upper peninsula Michigan
44.094   Gary Sharp         WD0HEB   Minnesota
44.096   Don Bennett        K4NGC    District of Columbia
44.098   Bruce ??      WD4HIM   Florida
44.100   Richard Elling          KB4HB    Alabama
44.102   Jeff King     WB8WKA   Michigan (lower peninsula)
44.104   Charles Greene          W1CG Rhode Island
44.106   Tyler Barnett      N4TY Kentucky
44.108   James Dugal        N5KNX    Louisiana
44.110   Richard Duncan          WD5B Arkansas
44.112   Bob Hoffman        N3CVL    Pennsylvania: western
44.114   Steven Elwood      N7GXP    N&S Dakota
44.116   Tom Kloos     WS7S Oregon: NW&Portland,Vancouver WA
44.118   Jon Andrews        WA2YVL   Maine
44.120   unassigned
44.122   Dale Puckett       K0HYD    Kansas
44.124   David Dodell       WB7TPY   Arizona
44.125.0-126  Earl Petersen      KF7TI    Southern Nevada
44.125.128-254     Bill Healy         ?    Northern Nevada
44.126   Karl Wagner        KP4QG    Puerto Rico
#
# 44.128 is reserved for testing.  Do not use for operational networks.
# You may safely assume that any packets with 44.128 addresses are bogons
# unless you are using them for some sort of testing
#
44.128   TEST
#
# International subnet coordinators by country
#
44.129   Japan         JG1SLY   Tak Kushida, JH3XCU Joly Kanbayashi
44.130   Germany       DL4TA    Ralf D Kloth
44.131   United Kingdom     G1PLT    Paul Taylor
44.132   Indonesia YB1BG    Robby Soebiakto
44.133   Spain         EA4DQX   Jose Antonio Garcia.  Madrid. (EA4DQX @ EA4DQX)
44.134   Italy         I2KFX
44.135   Canada        VE3JF    Barry McLarnon
44.136   Australia VK2ZXQ   John Tanner
44.137   Netherlands   PA0GRI   Gerard Van Der Grinten
```

44.138	Israel	4X1GP	Peleg Lapid
44.139	Finland	OH1MQK	Matti Aarnio
44.140	Sweden	SM0IES	Lennart
44.141	Norway	LA4JL	Per Eotang
44.142	Switzerland	HB9CAT	Marco Zollinger
44.143	Austria	OE1KDA	Krzysztof Dabrowski
44.144	Belgium	ON7LE	
44.145	Denmark	OZ1EUI	
44.146	Phillipines	DU1UJ	Eddie Manolo
44.147	New Zealand	ZL2BKC	Wayne Knowles
44.148	Ecuador	HC5K	Ted
44.149	Hong Kong	VS6EL	
44.150	Slovenija	S53FK	Iztok Saje
44.151	France	FC1BQP	Pierre-Francois Monet
44.152	Venezuela	OA4KO/YV5	Luis Suarez
44.153	Argentina	LU7ABF	Pedro Converso
44.154	Greece	SV1UY	Demetre Valaris
44.155	Ireland	EI9GL	Paul Healy
44.156	Hungary	HA5DI	Bela Markus
44.157	Chile	CE6EZB	Raul Burgos
44.158	Portugal	CT1DIA	Artur Gomes
44.159	Thailand	HS1JC	Kunchit Charmaraman
44.160	South Africa	ZS6BHD	John
44.161	Luxembourg	LX1YZ	Erny Tontlinger
44.162	Cyprus	5B4TX	C. Costis
44.163	Central America	TI3DJT	Chuck Hast
44.164	Surinam	PZ2AC	Otto Morroy
44.165	Poland	SP5WCA	Andrzej K. Brandt
44.166	Korea	HL9TG	Gary ?
44.167	India	VU2LBW	Lakshman ("Lucky") Bijanki
44.168	Taiwan	BV5AF	Bolon
44.169	Nigeria	5N0OBA	Kunle
44.170	Croatia	??	Sinisa Novosel
44.171	Serbia	(nobody volunteered yet)	
44.172	Sri Lanka	4S7EF	Ekendra
44.173	Mexico	XE????	(no one has volunteered yet)
44.174	Brazil	PP5AQ	Luiz F. Catalan
44.175	Cuba	CO2JA	Jose Amador
44.176	Turkey	TA2LA	Abdul ?

44.193	Outer Space-AMSAT	W3IWI	Tom Clark

Date: Wed, 14 Apr 1993 14:33:47 GMT
From: swrinde!cs.utexas.edu!uwm.edu!grc!don@network.UCSD.EDU
Subject: Baycom / PMP - problem
To: packet-radio@ucsd.edu

In article <1qftbfINNaco@news.uwsuper.edu> you write:

>Hi all,
> In my ignorance I assumed they were the same. Now I have a Baycom
> modem, (which works fine) and some software for the PMP version. I
> really need to use the PMP version or any thing that will give me
> source control of the program. I had already done extensive software
> mods to the PMP program and thought I was ready to go.

I use a Baycom modem with PMP software and it works great. The trick?....

First, you have to redefine the txport, rxport, cdport, and pttport parameters in the PMP.CFG file. Also the init lines.....

```
pttport 0x3fc 0x02 0
txport  0x3fc 0x01
rxport  0x3fe 0x10
cdport  0x3fe 0x20 0

init 0x3fc 0x01
init 0x3fb 0x40
```

BTW, I made no mods to the actual PMP program at all, just the PMP.CFG file.

Second, you have to have a carrier detect signal coming from your Baycom modem. This is pin 3 of the TCM3105 chip. It should go through the extra inverter in the 74x04 chip (I think that was the chip number) and then through a resistor to pin 6 of the DB25 RS232 connector. The resistor should be the same value as the one used on the incoming data line. (I know I'm being vague, but I'm at work and my info is at home and I'm doing this from memory).

> Does anyone know where I can get source for the baycomm style of modem
> or failing that where I can buy ready made modems that use the PMP
> software.

I'm pretty sure you can find the source on ucsd.edu. I had to use PMP because my old Toshiba 1000 laptop has DOS 2.1 built in and it is incompatible with the Baycom software. PMP seems to work fine. PMP is also, IMHO, much easier to use than the Baycom software. I have used the Baycom software on my 286 in the shack.

> P.S. The Baycom modems plug into a serial port and the PMP modems
> into a parallel port.

That is why you change the PMP.CFG file as above.

Good Luck, you should be able to make the Baycom modem work with the
PMP software and I know you'll be happy with it. I am!

73 de

```
   Donald D. Woelz, K9GR              Office Phone: 414-644-8700
   GENROCO, Inc.
   205 Kettle Moraine Drive North     k9gr@k9gr.ampr.org [44.92.1.48]
   Slinger, WI 53086   U.S.A.         don@genroco.com
--
   Donald D. Woelz                    Office Phone: 414-644-8700
   GENROCO, Inc.                      Toll Free:  800-243-6762
   205 Kettle Moraine Drive North     Office Fax: 414-644-6667
   Slinger, WI 53086   U.S.A.         24 hr Voicemail: 414-322-3891
```

Date: 14 Apr 93 12:06:58 GMT
From: swrinde!gatech!howland.reston.ans.net!newsserver.jvnc.net!netnews.upenn.edu!
prijat!triangle.cs.uofs.edu!bill@network.UCSD.EDU
Subject: Cable TVI interference
To: packet-radio@ucsd.edu

In article <1375@wells.UUCP>, edw@wells.UUCP (Ed Wells) writes:
|>
|>   It seems to me that the cable TV industry decided to use the same
|> frequencies in the cable that are used as many other ham and/or commercial
|> frequencies outside the cable, and now that leakage/acceptance is occuring,
|> they don't know how to deal with the monster they've created,
|> or their irate customers (who probably are demanding refunds).

How could they have done otherwise?? Cable frequencies start at 2 Mhz and go up to almost 1 Ghz according to the published industry standards. Most Cable TV starts at 54 Mhz and has at least 38 channels. Let's see, 38 * 6 = 228!! That makes it from 54 Mhz to 282 Mhz. That covers 2 ham bands (and pretty clos to a third) and dozens of other sevices. Short of fixing their leaks, there is no way to avoid interference. At least until they get the fiber in. ;-)

bill   KB3YV

```
--

   Bill Gunshannon     | "There are no evil thoughts, Mr. Reardon" Francisco
   bill@cs.uofs.edu    |  said softly, "except one; the refusal to think."
                       |         #include <std.disclaimer.h>
```

Date: Wed, 14 Apr 1993 13:09:10 GMT
From: sdd.hp.com!saimiri.primate.wisc.edu!eng.ufl.edu!spool.mu.edu!
howland.reston.ans.net!wupost!crcnis1.unl.edu!moe.ksu.ksu.edu!usenet-feed.umr.edu!
UMRVMA.umr.edu!S111674@network.UCSD.EDU
Subject: Cable TVI Interference
To: packet-radio@ucsd.edu

For all those wondering, according to a chart I have here are some
Statistics for you about cable TV channels and the such:

Channel	Bandwith(MHz)	PIX	COLOR	SOUND
17	138-144	139.25	142.83	143.75
18	144-150	145.25	148.83	149.75
19	150-156	151.25	154.83	155.75

And so on each is increased by 6 MHz

I read somewhere on the list about channel 24 well:

23	216-222	217.25	220.83	221.75
24	222-228	223.25	226.83	227.75
25	228-234	229.25	232.83	233.75

Looks like the 220 ham band could have the potential to get in with
these channels also. The 440 ham band would interfere with channels
59, 60, and 61, if anyone is interested.

Willie Sandin, N0MGJ
S111674@UMRVMA.UMR.EDU

Date: Wed, 14 Apr 1993 13:40:26 GMT
From: ghost.dsi.unimi.it!univ-lyon1.fr!babbage!ensl!chanterelle!
vdonabed@tcgould.tn.cornell.edu
Subject: DPK-2
To: packet-radio@ucsd.edu

Someone can give me the price of DPK-2 please ???
It's a D.R.S.I.'s TNC.

Thanks in advance

```
###################################################################
#                                                                 #
#         Vahagn DONABEDIAN : E-mail vdonabed@ens.ens-lyon.fr    #
#                                     vdonabed@frensl61.bitnet   #
#                                                                 #
#          Ecole Normale Superieure de Lyon              #
#                                                                 #
###################################################################
```

Date: 14 Apr 1993 13:50:20 GMT
From: saimiri.primate.wisc.edu!zazen!news.uwsuper.edu!hp.uwsuper.edu!pmcgilla@ames.arpa
Subject: DRSI modems
To: packet-radio@ucsd.edu

HI,

Some time ago someone posted out some code that would allow either NOS or NET to access a DRSI modem card. Would some kind soul tell me where that file is archived and under what name. I can't seem to find it.

Thanks,

--
Patrick L. McGillan
Computer Systems Specialist
University Of Wisconsin   Ph: (715) 394-8191
Superior, Wisconsin   pmcgilla@uwsuper.edu

Date: 14 Apr 93 13:56:53 GMT
From: news-mail-gateway@ucsd.edu
Subject: F6FBB 'Port' Numbers
To: packet-radio@ucsd.edu

I've been trying to solve this problem for a couple of weeks now, and it is still stumping me. I'm running the F6FBB code, on top of the G8BPQ node switch. All the ports (3 radio, 1 one modem) work correctly. Configuration is:

Port 1: PK-232 in KISS mode - attached to physical COM 1 at the PC
Port 2: DRSI Type II board, using the first connector on the card (DRSI 'Port 0')
Port 3: DRSI Type II board, using the 2nd connector (DRSI 'Port 1) (same card as above)
Port 4: Hayes modem

The problem I'm having shows up on incoming packet connects. The system always reports
that the incoming packet connect is on Port 1, even though it may have come in on
Port 2 or 3. As I said, the ports all function correctly, so I'm assuming I've got
a problem in the order of how the ports are accessed. I've got the ports defined
in the G8BPQ BPQCFG.TXT file in the same order, with the same PORTNUM, as in the
FBB PORT.SYS file. The node switch is keeping track of the ports correctly, of course.
It's just that the FBB can't seem to correctly determine which port the connect is
coming in on.
Any Ideas / solutions would be appreciated.
73,
Gary
N3KCD @ N3KCD.MD.USA.NA
anderson @ sdd.comsat.com

Date: Wed, 14 Apr 93 08:15:07 PDT
From: almaden.ibm.com@uunet.uu.net
Subject: F6FBB 'Port' Numbers
To: packet-radio@ucsd.edu

In <9304141356.AA22059@mrslate.sdd.comsat.com> Gary Anderson writes:
>...   is still
>
>The problem I'm having shows up on incoming packet connects. The system always reports
>that the incoming packet connect is on Port 1, even though it may have come in on
>Port 2 or 3. As I said, the ports all function correctly, so I'm assuming I've got
>a problem in the order of how the ports are accessed. I've got the ports defined
>in the G8BPQ BPQCFG.TXT file in the same order, with the same PORTNUM, as in the
>FBB PORT.SYS file. The node switch is keeping track of the ports correctly, of course.
>It's just that the FBB can't seem to correctly determine which port the connect is
>coming in on.
>Any Ideas / solutions would be appreciated.
>...

What you need is the next beta release of AA4RE BBS (2.1G) that should be out in a week or two .. :-) .. The BPQ switch does NOT identify the incoming port since it is possible it could change during the conversation. However, there are ways around this and I have the code somewhat functional right now.

Roy, AA4RE

Date: 14 Apr 93 17:57:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: Getting in contact with TCP coordinator for Southern Wisconsin
To: packet-radio@ucsd.edu

I would like to get an IP number. Who would I contact in the southern Wisconsin area?

Tom Fleming N9SZF
FLEMINGT@WISPLAN.UWEX.WISC.EDU

Date: 14 Apr 93 16:06:58 GMT
From: news-mail-gateway@ucsd.edu
Subject: help
To: packet-radio@ucsd.edu

help

Date: 14 Apr 1993 15:34:27 GMT
From: math.fu-berlin.de!cs.tu-berlin.de!crusoe@uunet.uu.net
Subject: KA9Q more than 2 packet drivers ?
To: packet-radio@ucsd.edu

We try to route two protocols (ethernet, isdn) through KA9Q - both are implemented under DOS as packet drivers at two different soft-interrupts (0x60 and 0x70) but they don't work together. Does KA9Q only support one external packet driver or a certain interrupt-area?

W can get both, the WD8003E driver and the PAPI driver running separately, but they don't work at the same time. Any hint is appreciated.

Please answer via e-mail, because I'm usually not reading this group.
Thanks for evry hint in advance!

--
Andre'____
crusoe@cs.tu-berlin.de

Date: Wed, 14 Apr 1993 10:56:55 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!news.csuohio.edu!sww@network.UCSD.EDU
Subject: MSYS 1.14; is it out?
To: packet-radio@ucsd.edu

Mike and his two beta testers (NO8M and WB8BII) are signing [MSYS-1.14] but the release has not been made. The archive is being compiled so it will not be long. I will post the release to Cleveland Hamnet LLBBS when it happens.
73
Steve, NO8M

Date: 14 Apr 1993 13:51:05 -0400
From: ucsnews!sol.ctr.columbia.edu!eff!enterpoop.mit.edu!ai-lab!hal.gnu.ai.mit.edu!not-for-mail@network.UCSD.EDU
Subject: Packet radio in Washington, DC - info please.
To: packet-radio@ucsd.edu

I will soon be able to recieve packet radio in the Washington, D.C. area (I'm in New York for the next month). Is there anybody out there in Washington was could send me a list of the most active channels for 1200 buad packet, lists of digipeters, etc? I'd really appreciate it. Thanks.

Date: 14 Apr 1993 14:53:17 GMT
From: news.tek.com!cascade.ens.tek.com!ronk@uunet.uu.net
Subject: Possible KAME v6.1 problem
To: packet-radio@ucsd.edu

I received my KAM Enhancement board (KAME v6.1) and HostMaster II+ (v3.11) Friday and installed them (also Friday).

I have set up my KAME to automatically forward to my local BBS (running AA4RE). While my KAME does forward both Personal messages and Bulletins (I find them on the BBS), it does not flag the messages/bulletins on my KAME as being forwarded (F) or even kill the message. Consequently, it will try again an hour later.

Has anyone else experienced this problem or is it just me? Kantronics hasn't heard about the problem from anyone else when I called Monday. (It took 3-1/2 hours to get through.)

FYI, DISPlay Pbbs shows:

```
  PBBS     105
  PBFORWRD OR9000  VHF  AFTER 1
  PBHEADER ON
  PBHOLD   OFF
  PBKILLFW OFF
  PBLO     NEW VARIABLE
  PBPERSON OFF
  PTEXT    Welcome to OR0151-1/PBBS. Please leave a message.
```

Translation:

> My PBBS will store 105,000 bytes of messages. The PBBS forwards to the node OR9000 via the VHF port when someone disconnects from the PBBS and will attempt once an hour until delivery is made. Received headers are stored in the messages when they are forwarded from the BBS. Messages received for forwarding will not be held for SYSOP review, but will be automatically forwarded. Messages forwarded will not be killed, but will be marked with the forwarded flag (F) to prevent them from forwarding again. The PBBS will list messages from newest to oldest, but the user has the option of changing the order in which messages are listed by using the LO command. The personal mailbox will allow messages to be sent to any callsign. And last but not least the customized text that users of my PBBS receive when they connect in.

Other DISPlay information is available upon request. And yes, I am using the KAME in Civil Air Patrol.

--
Ron Kirkpatrick N7RFA/BF151/AFA5HZ
News Administrator/Postmaster
Tektronix, Inc
503-627-6707

Date: 14 Apr 93 12:46:41 GMT
From: news-mail-gateway@ucsd.edu
Subject: RFD: reorganization of rec.radio.amateur
To: packet-radio@ucsd.edu

>I am disturbed that we have had *little* input from the Listserver users. To
>that end, if a listserver user doesn't know where to turn to, in order to post

>their opinions to news.groups, I have set up news.groups@ve6mgs.ampr.ab.ca to cross post to: news.groups,rec.radio.amateur.misc,rec.radio.amateur.packet for the RFD and CFV period.
>-- 73 de VE6MGS/Mark

well....we're kinda powerless to do anything about it - ifn y'all gonna break things into smithereens, and the server gang doesn't make it a list, we're never going to see it (unless we get the Real News Feed someday).

certainly i understand the power of a threaded reader (such as tapcis/tappet combination for running CIS forums), but from the mail side, things don't seem to be so oppressive or overwhelming that i can't at least browse the headings for interesting things and use the search feature of my file browser to locate anything of immediate interest....

and i can put it aside (famous last words...), i guess. is the problem really from those that have only a narrow interest in this all-encompassing field of amateur radio yet feel their subject is deserving of the fame of a rec.radio.amateur.<subject> heading?

of course, i haven't figured out those cost charts Paul posts yet either...so maybe i'm all wet...but the current system seems to be working for me so i'm not sure a change would be "good".

bill wb9ivr%pubs%genav.mlb@ns14.cca.cr.rockwell.com

Date: 14 Apr 93 09:41:11 CDT
From: swrinde!gatech!howland.reston.ans.net!wupost!uwm.edu!linac!uchinews!raistlin!timbuk.cray.com!hemlock.cray.com!andyw@network.UCSD.EDU
To: packet-radio@ucsd.edu

References <1993Apr11.005402.14265@ke4zv.uucp>, <1993Apr14.080031.15737@qualcomm.com>, <1993Apr14.130727.21299@cunews.carleton.ca>
Subject : Re: Rich Man's Packet ... : -)

Ian McEachern (VE3PFH) writes:
> [...]
> Of course as we move up to the microwave bands the whole story starts to change. But for those bands we would need a modem with a 144 MHz IF (to take advantage of the DEM transvertors).
> [...]

I've toyed with the idea of building a small transverter to convert the 28MHz IF to 144, to allow the 1296 & higher Down East transverters to be used. I was figuring on something as

simple as a crystal locked PLL LO feeding a couple of DBM.
Add a 28MHz filter on rx and a toko helical on tx - maybe
a single stage of amplification in each direction..

I'm thinking that the NF isn't important this far down the
chain, but I should pay attention to the LO quality.

Am I missing something ? It's nice to think in terms of little
building blocks, but I'm always afraid I'll forget some key
detail and it'll perform like a dog.

Of course, all this would have much more authority if I'd just finish
off the interface to the DEM 440 transverter :-)

--
andyw.   N0REN/G1XRL

andyw@aspen.cray.com   Andy Warner, Cray Research, Inc. (612) 683-5835

Date: Wed, 14 Apr 1993 13:07:27 GMT
From: swrinde!cs.utexas.edu!utnut!nott!cunews!news@network.UCSD.EDU
To: packet-radio@ucsd.edu

References <1993Apr09.145903.49266@watson.ibm.com>,
<1993Apr11.005402.14265@ke4zv.uucp>, <1993Apr14.080031.15737@qualcomm.com>
Subject : Re: Rich Man's Packet ... : -)

Phil Karn writes:
>The WA4DSY transmitter is pretty good, but the receiver really ought
>to be replaced with a DSP engine. Modern DSPs are probably fast enough
>to do a pretty good job of coherent demodulation at 56kb/s (the DSY

This sounds good, but I bet the DSP would cost as much or more than all
the components on the DSY modem now.

10 dB improvement should be easy to do, but the cost would start
to put the modem into the TS850 price range, without RF. In most
cases (except southern Calif. of course:-) that 10 dB is not really
needed with existing transverters. At 440 and 220, if you have
line of sight 10 watts should be more than adequate to give decent
performance with the existing modem. If you don't have line of
sight other problems (like ISI from multipath) are going to give
you a real hard time. If the DSP can make use of the multipath
signals to enhance it's performance, it would be useful!

Of course as we move up to the microwave bands the whole story starts to change. But for those bands we would need a modem with a 144 MHz IF (to take advantage of the DEM transvertors).

The adjacent channel performance of the stock DSY modem isn't that great (at least on my modem it isn't), perhaps good digital filtering could help out there some (tho I suspect that most of the degradation would be due to strong adacent channels getting into the lo IF). But then I don't know of anybody else that is seriously considering putting up 2 DSY repeaters on adjacent channels from the same site for LAN traffic.

About coherent demod. The reason (at least the reason explained in the GRAPES video) that non-coherent was chosen, was in part, because if offered much faster lock up times. What kind of lock up times can you reasonably get with the sort of demod you're looking at? I know commercial burst demods can lock up in less than 64 symbols, but then for $15K one would expect fast lock up time.

im

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